

SR202 thru SR206

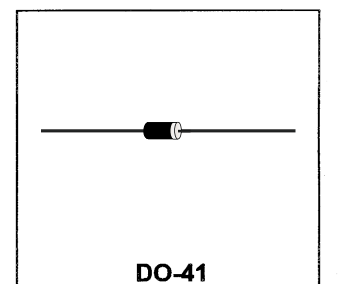
Schottky Barrier Rectifiers

Using the Schottky Barrier principle with a Molybdenum barrier metal. These state-of-the-art geometry features epitaxial construction with oxide passivation and metal overlay contact. Ideally suited for low voltage, high frequency rectification, or as free wheeling and polarity protection diodes.

* Low Forward Voltag.
* Low Switching noise.
* High Current Capacity
* Guarantee Reverse Avalance.
* Guard-Ring for Stress Protection.
* Low Power Loss & High efficiency.
* 125 °C Operating Junction Temperature
* Low Stored Charge Majority Carrier Cnduction.
* Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-O

SCHOTTKY BARRIER RECTIFIERS

2.0 AMPERES
20-60 VOLTS



DO-41

DIM	MILLMETERS	
	MIN	MAX
A	2.00	2.70
B	25.40	----
C	4.10	5.20
D	0.70	0.90

CASE---
Transfer molded plastic

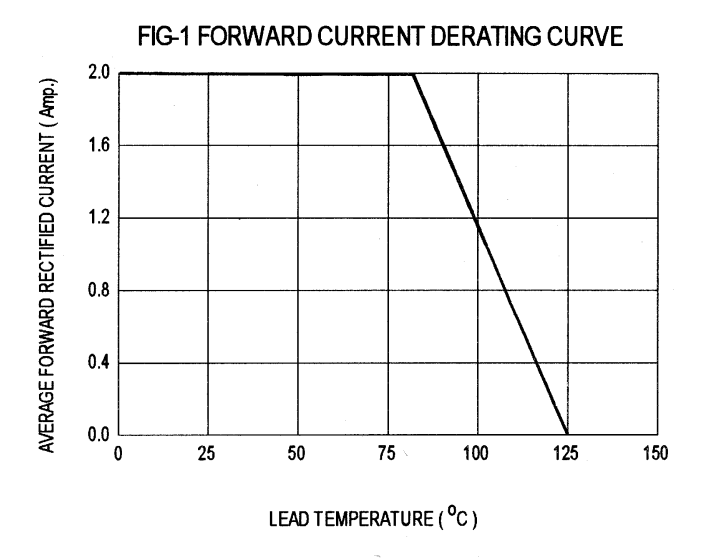
POLARITY---
Cathode indicated polarity band

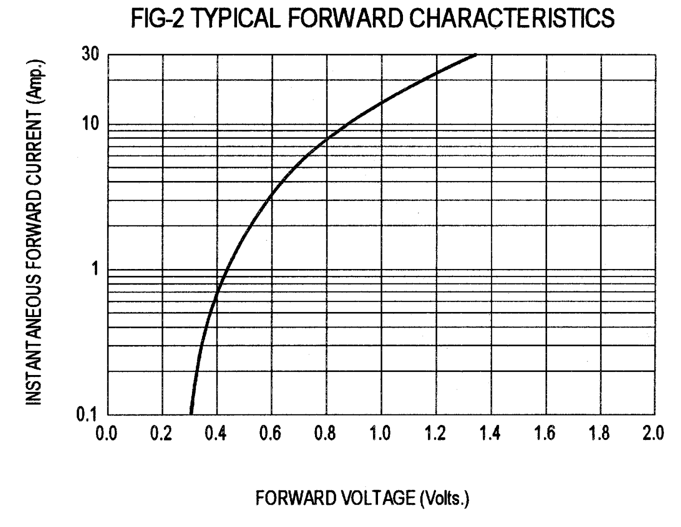
MAXIMUM RATINGS

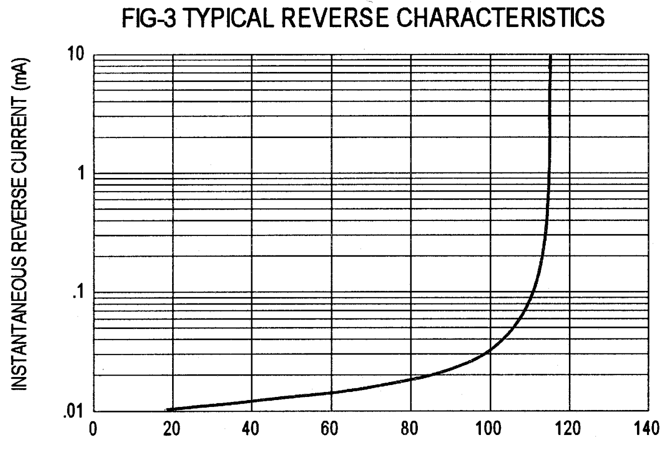
Characteristic	Symbol	SR					Unit
		202	203	204	205	206	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	50	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	V
Average Rectifier Forward Current	I_O	2.0					A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware,single phase,60Hz)	I_{FSM}	50					A
Operating and Storage Junction Temperature Range	T_J , T_{stg}	- 65 to + 125					°C

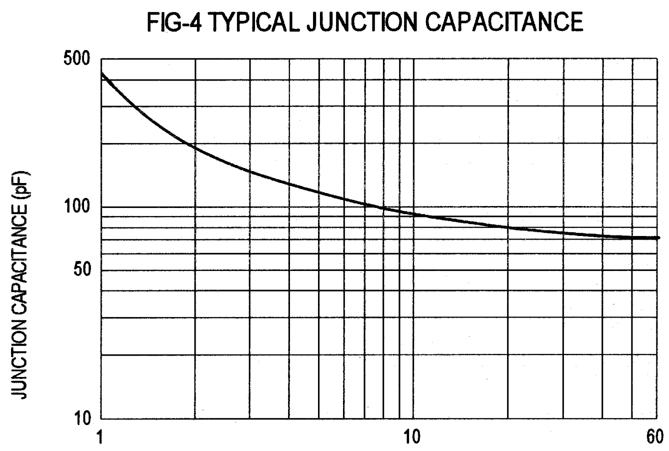
ELECTRICAL CHARACTERISTICS

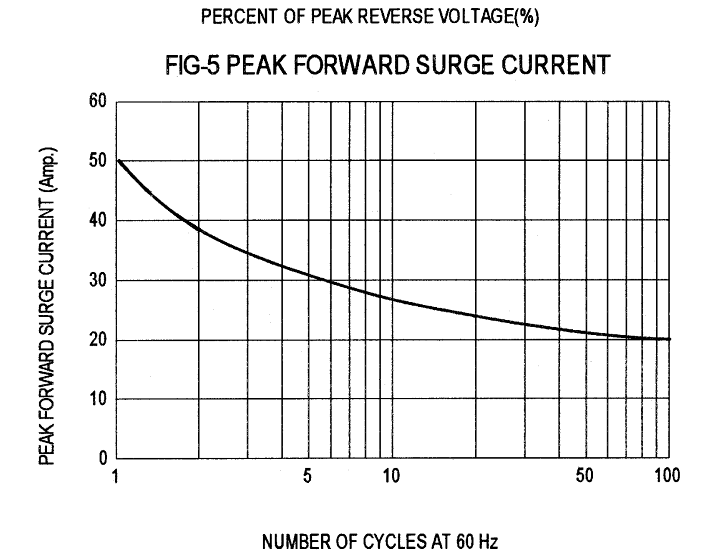
Characteristic	Symbol	SR					Unit
		202	203	204	205	206	
Maximum Instantaneous Forward Voltage (I_F=2.0 Amp)	V_F	0.55			0.65		V
Maximum Instantaneous Reverse Current (Rated DC Voltage, T_C = 25 °C) (Rated DC Voltage, T_C = 100 °C)	I_R	2.0 50					mA
Typical Junction Capacitance (Reverse Voltage of 4 volts & f=1 MHz)	C_P	105			90		pF

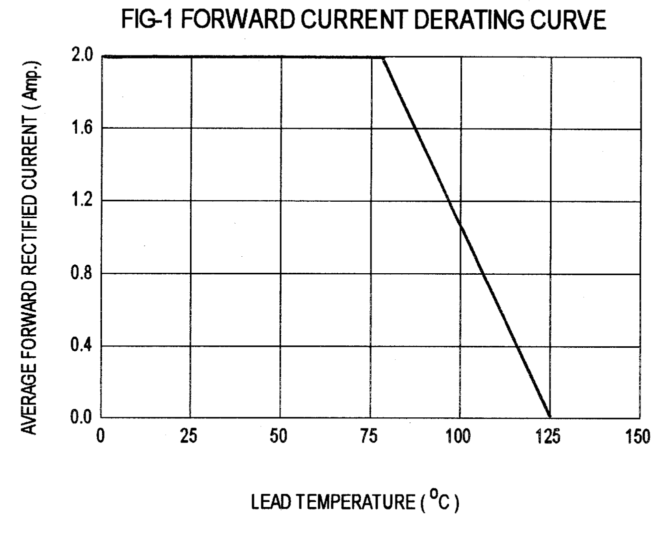

FIG-1 FORWARD CURRENT DERATING CURVE
AVERAGE FORWARD RECTIFIED CURRENT (Amp.)
2.0
1.6
1.2
0.8
0.4
0.0
0
25
50
75
100
125
150
LEAD TEMPERATURE (°C)

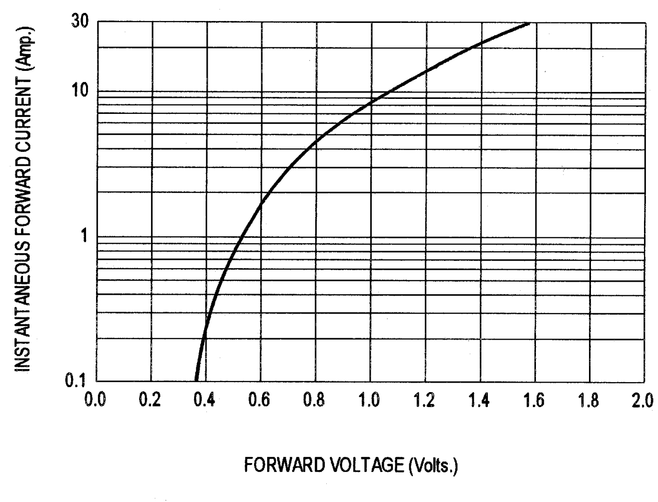

FIG-2 TYPICAL FORWARD CHARACTERISTICS
INSTANTANEOUS FORWARD CURRENT (Amp.)
30
10
1
0.1
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
FORWARD VOLTAGE (Volts.)

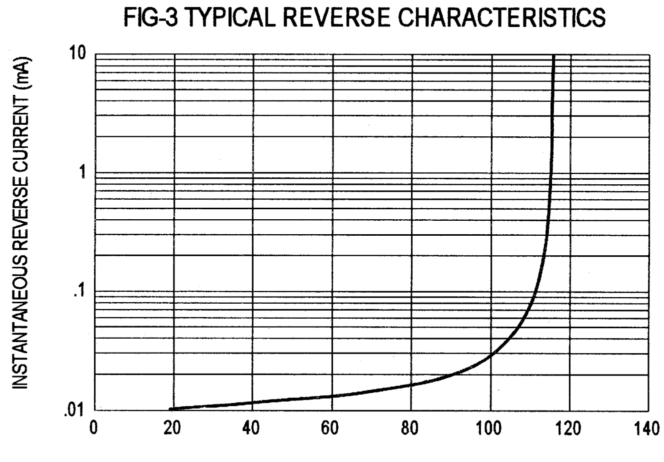

FIG-3 TYPICAL REVERSE CHARACTERISTICS
INSTANTANEOUS REVERSE CURRENT (mA)
10
1
.1
.01
0
20
40
60
80
100
120
140
PERCENT OF PEAK REVERSE VOLTAGE(%)

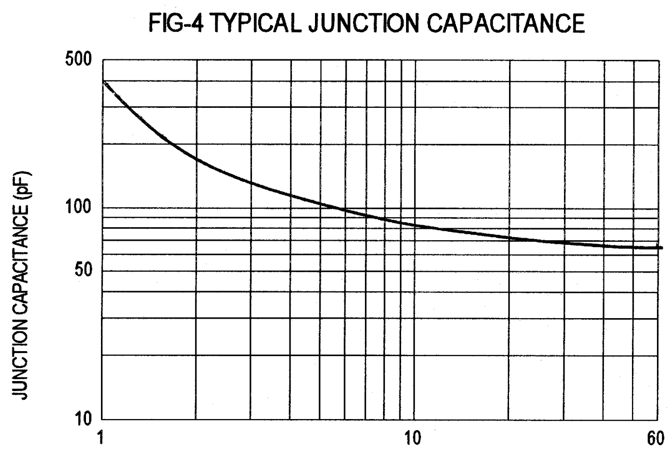

FIG-4 TYPICAL JUNCTION CAPACITANCE
JUNCTION CAPACITANCE (pF)
500
100
50
10
1
10
60
REVERSE VOLTAGE (Volts.)

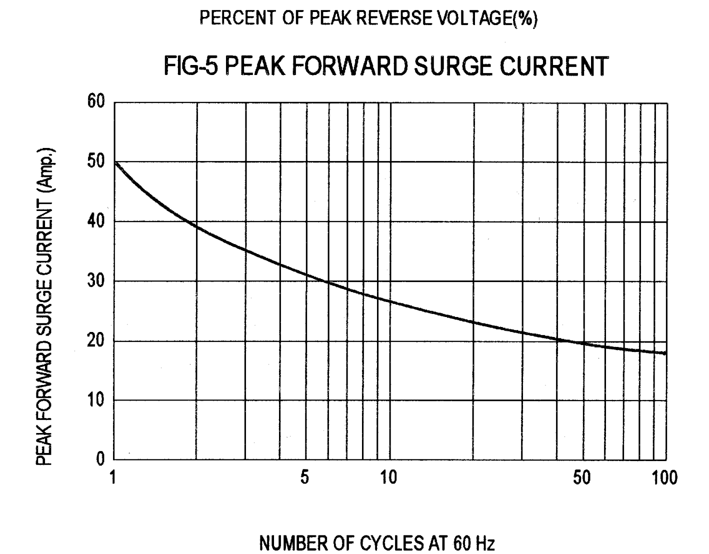

FIG-5 PEAK FORWARD SURGE CURRENT
PEAK FORWARD SURGE CURRENT (Amp.)
60
50
40
30
20
10
0
1
5
10
50
100
NUMBER OF CYCLES AT 60 Hz


FIG-1 FORWARD CURRENT DERATING CURVE
AVERAGE FORWARD RECTIFIED CURRENT (Amp.)
2.0
1.6
1.2
0.8
0.4
0.0
0
25
50
75
100
125
150
LEAD TEMPERATURE (^{o}C)


FIG-2 TYPICAL FORWARD CHARACTERISTICS
INSTANTANEOUS FORWARD CURRENT (Amp.)
30
10
1
0.1
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
FORWARD VOLTAGE (Volts.)


FIG-3 TYPICAL REVERSE CHARACTERISTICS
INSTANTANEOUS REVERSE CURRENT (mA)
10
1
.1
.01
0
20
40
60
80
100
120
140
PERCENT OF PEAK REVERSE VOLTAGE(%)


FIG-4 TYPICAL JUNCTION CAPACITANCE
JUNCTION CAPACITANCE (pF)
500
100
50
10
1
10
60
REVERSE VOLTAGE (Volts.)


FIG-5 PEAK FORWARD SURGE CURRENT
PEAK FORWARD SURGE CURRENT (Amp.)
60
50
40
30
20
10
0
1
5
10
50
100
NUMBER OF CYCLES AT 60 Hz